

Material safety data sheet

According to EU Regulation 1907/2006 in the current version

PE (HDPE, LDPE) containers**1. Identification of the substance/mixture and company**

Generic name : POLYETHYLENE (PE) with versions HIGH DENSITY (HDPE) / LOW DENSITY (LDPE)
Utilization: Industrial and professional use
Supplier company identification: **Elemental SRL**, Piața Cazărmii no.15, 410188-Oradea, jud.Bihor, Romania
Tel/Fax: +40259-436.755, www.elemental.com
Emergency: RO: număr național pentru cazuri de urgență: 021 3183606 Institutul de Sănătate Publică București.
International emergency number: +49 180 2273-112

2. Hazards Identification

2.1 Classification of the substance or mixture**· Classification according to Regulation (EC) No 1272/2008**

The substance is not classified according to the CLP regulation.

· Classification according to Directive 67/548/EEC or Directive 1999/45/EC

The preparation is not classified as dangerous according to Directive 1999/45/EC and following amendments.

· Information concerning particular hazards for human and environment

The product is not hazardous in the form in which it is placed on the market and under the normal and recommended conditions of storage and use. The product is not dangerous according to the criteria set by the European Union. See also sections 4 and 11. The preparation is stable under normal conditions of storage and use. It is not hazardous to the environment in its normal state.

2.2 Label elements**· Labelling according to Regulation (EC) No 1272/2008** Void· **Hazard pictograms** Void· **Signal word** Void· **Hazard statements** Void**2.3 Other hazards****· Results of PBT and vPvB assessment**· **PBT:** Not applicable.· **vPvB:** Not applicable.**3. Declaration of ingredients**

3.1 Chemical characterization: Substances

CAS No.	Description PE:
9002-88-4	(Homopolymer)
25087-34-7	(Copolymer with 1-Butene)
25213-02-9	(Copolymer with 1-Hexene)
9010-79-1	(Copolymer with 1-Propene)

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· Identification number(s) N.A.

4. First aid measures

4.1 Description of first aid measures

General information:	No special measures required.
After inhalation:	Dust or gas/vapours released by heat: move the affected person away from the contaminated area into fresh air; seek medical assistance.
After skin contact:	In case of contact with melted material, cool down with cold water and seek medical assistance. Do not remove the product that solidified on skin. Treat as a burn.
After eye contact:	Rinse opened eye for several minutes under running water.
After swallowing:	No specific measure requested in case of ingestion. If needed seek medical assistance.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5. Fire fighting measures

5.1 Extinguishing media

- **Suitable extinguishing agents:** Water, water spray, foam, dry chemicals, carbon dioxide.
- **Special hazards arising from the substance or mixture** The product, when involved in a fire, burns with a sooty flame and release fumes made up of water, carbon dioxide, carbon monoxide (when starved of oxygen) and other combustion products.

5.2 Advice for firefighters

- **Protective equipment:** Wear suitable protective clothing (helmet, goggles, fire resistant gloves, boots) and protect respiratory organs (self contained breathing apparatus).
- **Additional information** The product is combustible. Cool endangered receptacles with water spray.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Do not walk on granules to avoid slipping.

- **Environmental precautions:** Do not allow product to reach sewage system or any water course.
- **Methods and material for containment and cleaning up:** Collect mechanically. Reuse if possible or dispose of as required by national and local regulations (see section 13).

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6.2 Reference to other sections See Section 13 for disposal information.
No dangerous substances are released.

7. Handling and storage

7.1 Handling:

- **Precautions for safe handling** Powder formation by abrasion must be avoided during handling and transportation, especially when unloading; if such formation occurs, the powder must be eliminated immediately. During the processing of the product, avoid inhalation of fumes or powders, by providing good ventilation of the workroom and, if necessary, by a suitable exhaust system.
- **Information about fire – and explosion protection:** Avoid dispersion of dust in air to reduce potential for ignition or explosion.

7.2 Conditions for safe storage, including any incompatibilities

- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Earth storage silos as precautionary measure against the static electricity build-up.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** In storage and working areas avoid pellets spilling as a possible cause of slipping. Product should be stored in a safe manner, to avoid danger from unstable or damaged packaging units (octabins/bags/boxes on pallet). In particular, stacking of packaged units can be dangerous to warehouse personnel.
- **Specific end use(s)** No further relevant information available.

8. Exposure controls / personal protection

8.1 Additional information about design of technical facilities

No further data; see item 7

8.2 Control parameters

- **Ingredients with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists valid during the making were used as basis.
- **Exposure controls**

8.3 Personal protective equipment

- **General protective and hygienic measures:** Traces of monomers and other volatile substances may be given off during processing, particularly at unusually high processing temperatures. Work rooms must be provided with adequate ventilation and exhaust equipment to collect dust and gas/vapours that may be evolved during the conversion.
- **Respiratory protection:** In normal conditions masks with antidust filters should be available for use when requested.
- **Protection of hands:** Gloves resistant to chemicals. Breakthrough time of the glove material: see producer's data.
- **Material of gloves** The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
- **Penetration time of glove material** The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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- **Eye protection:** Gauze goggles
- **Body protection:** Standard work clothes.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form: solid

Colour: natural white

Odour: Odourless

pH-value: Not applicable.

Melting point/Melting range: >120°C

Boiling point/Boiling range: Undetermined.

Flash point: Not applicable.

Ignition temperature: ~340°C

Danger of explosion: Product does not present an explosion hazard.

Explosion limits:

Lower: Not determined.

Upper: Not determined.

Vapour pressure: Not applicable.

Density at 20°C: 0.94-0.97 g/cm³

Bulk density at 20°C: 450-600 kg/m³

Solubility in / Miscibility with water: Insoluble.

Viscosity: Not applicable

Dynamic: Not applicable.

Kinematic: Not applicable.

· **Other information** No further relevant information available.

10. Stability and reactivity

10.1 Reactivity

· **Chemical stability**

· **Thermal decomposition / conditions to be avoided:** Prevent the formation of noxious gases and vapours by using the advised conversion conditions.

Prolonged exposure to temperatures above 250°C may cause resin degradation.

· **Possibility of hazardous reactions** No dangerous reactions known.

· **Conditions to avoid** No further relevant information available.

· **Incompatible materials:** Avoid the contact with oxidising substances.

· **Hazardous decomposition products:** No dangerous decomposition products known.

11. Toxicological information

11.1 Information on toxicological effects

· **Acute toxicity:**

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- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** The product's dust may cause irritation of eyes.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:** When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.
The substance is not subject to classification according to the latest version of the EU lists.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)** No evidence of these effects has been reported

12. Ecological information

12.1 Toxicity

- **Aquatic toxicity:** No further relevant information available.
 - **Persistence and degradability** The product is essentially a high molecular weight polymer, not regarded as ecotoxic.
- Other information:** The product is a non biodegradable polymer.

12.2 Behaviour in environmental systems:

- **Bioaccumulative potential** Does not accumulate in organisms
- **Mobility in soil** No further relevant information available.

12.3 Results of PBT and vPvB assessment

- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13. Disposal considerations

13.1 Waste treatment methods

- **Recommendation** The same safety considerations that apply to the product as it is, apply to scraps/ waste as well. Residues should be disposed of as required by national and local regulations.
After suitable treatment (cleaning, grinding, etc.), the product can be safely re-used, as is or mixed with fresh material, when this is compatible with the intended final application.
The incineration must be done under approved conditions, possibly with energy recovery and only at suitable facilities equipped with a scrubber for the treatment of fumes before their release into the atmosphere.

13.2 Uncleaned packaging:

- **Recommendation:** Disposal must be made according to official regulations.

14. Transport information

14.1 UN-Number

- **ADR, ADN, IMDG, IATA** Void

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14.2 UN proper shipping name

- ADR, ADN, IMDG, IATA Void

14.3 Transport hazard class(es)

- ADR, ADN, IMDG, IATA Void

14.4 Packing group

- ADR, IMDG, IATA Void
- Marine pollutant: No
- Special precautions for user Not applicable.

14.5 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

14.6 Transport/Additional information

The product is not classified as dangerous for transportation according to the following regulations: ADR/RID, IMO, IATA.

- IATA N.A.
- MARPOL: N.A.
- UN "Model Regulation": UN-, -

15. Regulatory information

15.1 Chemical safety assessment: Assessment not required

16. Additional information

16.1 Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

Disclaimer

This information is based on our present knowledge, and believed to be correct at the date of publication. However, no representation is made concerning its accuracy and completeness. It is intended as guidance only, and is not to be considered a warranty or quality specification. All materials may present unknown hazards, and should be used with caution. Although certain hazards are described, we cannot guarantee that these are the only hazards which exist.